

# WATERFORD

*Fine Porcelain Enamel, Cast Iron Stoves from Ireland*



## EMERALD Vented Gas Heater

Owners &  
Installation Manual



MODELS: E63-NG1 Natural Gas E63-LP1 Propane

### WARNING:

If the information in these instructions are not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

### FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

### FOR YOUR SAFETY

What to do if you smell gas:

- Do not try to light any appliance
- Do not touch any electrical switch: do not use any phone in your building.
- Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

Tested by:  
Warnock Hersey



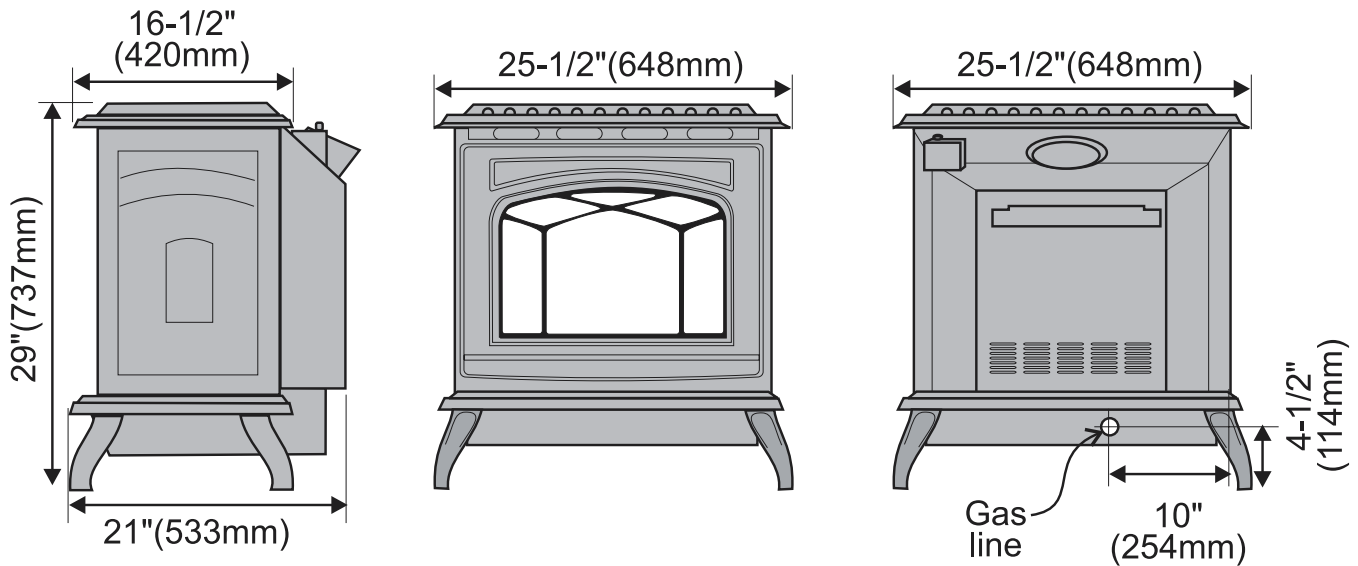
*Installer:* Please complete the details on the back cover and leave this manual with the homeowner.

*Homeowner:* Please keep these instructions for future reference.



**To the New Owner:**

Congratulations! You are the owner of a state-of-the-art EMERALD Gas Stove by Waterford Irish Stoves. The Waterford Gas Series of hand crafted appliances has been designed to provide you with all the warmth and charm of a woodstove, at the flick of a switch. The models E63-NG1 and E63-LP1 of this series has been approved by Warnock Hersey for both safety and efficiency. As it also bears our own mark, it promises to provide you with economy, comfort and security for many trouble free years to follow. Please take a moment now to acquaint yourself with these instructions and the many features of your Waterford Gas Stove.

**Minor imperfections such as blisters, seeds or thin flaws visible in this product are not defects. These are inherent in the hand-crafted enamel process and cannot be avoided, and they substantiate that this is genuine porcelain enamel.**



We recommend that our products be installed and serviced by professionals who are certified in the U.S. by NFI (National Fireplace Institute) or in Canada by WETT (Wood Energy Technical Training).



[www.nficertified.org](http://www.nficertified.org)

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# SAFETY LABEL

This is a copy of the label that accompanies each EMERALD Freestanding Gas Stove. We have printed a copy of the contents here for your review. The safety label is located on the inside of the drop down pedestal door.

NOTE: Waterford units are constantly being improved. Check the label on the unit and if there is a difference, the label on the unit is the correct one.

## Copy of the Safety Label for the E63-NG1 Natural Gas

**US** Certified for service for Canada and U.S.A. Report No. 476-1633-00 (Mar. 1999)

Tested to: CAN1-2.1M86, ANSI Z21.11.1a-1993, CGA 2-17-M91, ANSI Z21.88-1998/CSA 2.33-M98



**WATERFORD**

207

Serial No./ No de s

### FACTORY EQUIPPED FOR NATURAL GAS | Model: E63NG1 | ÉQUIPÉ À L'USINE POUR GAZ NATURAL

Minimum supply pressure	5" WC/C.E. (1.25 kPa)	Pression d'alimentation minimum
Manifold pressure High	3.8" WC/C.E. (0.94 kPa)	Pression à la tubulure d'échappement élevée
Manifold pressure Low	1.1" WC/C.E. (0.27 kPa)	Pression à la tubulure d'échappement basse

#### Factory Equipped for Altitude 0-2000 ft.

Maximum Input	38,000 Btu/h (11.14 Kw/h)	Débit Calorifique maximum
Minimum Input	19,000 Btu/h (5.57 Kw/h)	Débit Calorifique minimum
Orifice size	#32 DMS (2.9mm)	Dimensions de l'orifice
Output -fan OFF	27740 Btu/h (8.13 Kwh)	Débit Calorifique-Ventilateur Éteint Btu/h
Output -fan ON	28690 Btu/h (8.41 Kw/h)	Débit Calorifique-Ventilateur en Marche Btu/h
Altitude	0-2000 ft/pi (0-610m)	L'altitude

#### Convertible for Altitude 2000-4500 ft.

Maximum Input	34,000 Btu/h (9.96 Kw/h)	Débit Calorifique maximum
Minimum Input	17,000 Btu/h (4.98 Kw/h)	Débit Calorifique minimum
Orifice size	#32 DMS (2.87mm)	Dimensions de l'orifice
Output -fan OFF	24820 Btu/h (7.28 Kwh)	Débit Calorifique-Ventilateur Éteint Btu/h
Output -fan ON	25670 Btu/h (7.52 Kw/h)	Débit Calorifique-Ventilateur en Marche Btu/h
Altitude	2000-4500 ft/pi (0-1372m)	L'altitude

#### Convertible to 27,000 Btu for Altitude 0 - 4500 ft. with Kit #: 260-920

Maximum Input	27,000 Btu/h (7.91 Kw/h)	Débit Calorifique maximum
Minimum Input	13,500 Btu/h (3.95 Kw/h)	Débit Calorifique minimum
Orifice size	#40 DMS (2.49mm)	Dimensions de l'orifice
Output -fan OFF	19,575 Btu/h (5.74 Kwh)	Débit Calorifique-Ventilateur Éteint Btu/h
Output -fan ON	20,331 Btu/h (5.96 Kw/h)	Débit Calorifique-Ventilateur en Marche Btu/h
Altitude	0-4500 ft/pi (0-1372m)	L'altitude

Fireplace Products International Ltd.  
Delta, BC, Canada  
Made in Canada/Fabrique au Canada

### GAS FIRED ROOM HEATER

This appliance must be installed in accordance with local codes, if any; if not, follow the current ANSI Z223.1 in the USA or the current CAN/CGA-B149 in Canada.  
Electrical supply 115VAC, 1.13 A, 60Hz.  
Not for use with solid fuel.

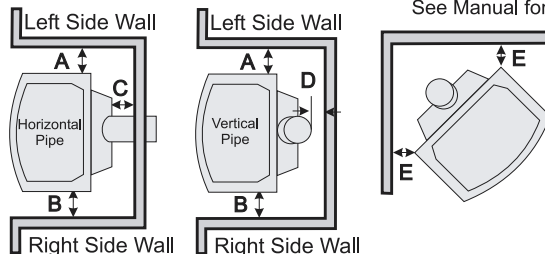
Cet appareil doit être installé conformément aux exigences des codes locaux, s'il n'existe aucun code local, se conformer à la norme ANSI Z223.1 / CAN 1-B149.  
Alimentation électrique 115 V, 1.13 A, 60 Hz.  
Ne doit pas être utilisé avec uncombustible solide.

### Minimum Clearances to Combustibles/Degagement Minimum De Matériaux Combustibles

Minimum ceiling height from top of unit: 18"/460mm  
Minimum plafond hauteur en haut de l'appareil: 18"/460mm

- A 6"/150mm**
- B 10"/255mm**
- C 5"/125mm**
- D 2" / 50mm**
- E 2"/50mm**

908-097  
02/00



# SAFETY LABEL

## Copy of the Safety Label for the E63-LP1 Propane



**Listed:** GAS FIRED VENTED ROOM HEATER  
**Certified for/Certifiée pour:** CANADA and U.S.A.  
**Report No.** 476-1633-00 (Mar. 1999)



**WATERFORD**

DO NOT REMOVE THIS LABEL /  
 NE PAS ENLEVER CETTE ÉTIQUETTE

WH

**Tested to:** CAN1-2.1M86, ANSI Z21.11.1a-1993,  
 CGA 2-17-M91, ANSI Z21.88-1998/CSA 2.33-M98

Serial No./ No de serie

**FACTORY EQUIPPED FOR PROPANE GAS Model: E63LP1 ÉQUIPÉ À L'USINE POUR GAZ PROPANE**

Minimum supply pressure	12" WC/C.E. (3.00 kPa)	Pression d'alimentation minimum
Manifold pressure High	11" WC/C.E. (2.74 kPa)	Pression à la tubulure d'échappement élevée
Manifold pressure Low	2.9" WC/C.E. (0.72 kPa)	Pression à la tubulure d'échappement basse

**Factory Equipped for 38,000 Btu**

Maximum Input	38,000 Btu/h (11.14 Kw/h)	Débit Calorifique maximum
Minimum Input	19,000 Btu/h (5.57 Kw/h)	Débit Calorifique minimum
Orifice size	#50 DMS (1.8mm)	Dimensions de l'orifice
Output -fan OFF	28,500 Btu/h (8.35 Kwh)	Débit Calorifique-Ventilateur Éteint Btu/h
Output -fan ON	29,374 Btu/h (8.61 Kw/h)	Débit Calorifique-Ventilateur en Marche Btu/h
Altitude	0-2000 ft/pi (0-610m)	L'altitude

**Convertible to 29,000 Btu for altitude 0 - 4500 ft. with Kit #: 260-922**

Maximum Input	29,000 Btu/h (8.5 Kw/h)	Débit Calorifique maximum
Minimum Input	14,500 Btu/h (4.25 Kw/h)	Débit Calorifique minimum
Orifice size	#52 DMS (1.61mm)	Dimensions de l'orifice
Output -fan OFF	21,518 Btu/h (6.31 Kwh)	Débit Calorifique-Ventilateur Éteint Btu/h
Output -fan ON	22,330 Btu/h (6.54 Kw/h)	Débit Calorifique-Ventilateur en Marche Btu/h
Altitude	0-4500 ft/pi (0-1372m)	L'altitude

**GAS FIRED ROOM HEATER**

This appliance must be installed in accordance with local codes, if any; if not, follow the current ANSI Z223.1 in the USA or the current CAN/CGA-B149 in Canada.

Electrical supply 115VAC, 1.13 A, 60Hz.

Not for use with solid fuel.

Cet appareil doit être installé conformément aux exigences des codes locaux, s'il n'existe aucun code local, se conformer à la norme ANSI Z223.1 / CAN 1-B149.

Alimentation électrique 115 V, 1.13 A, 60 Hz.

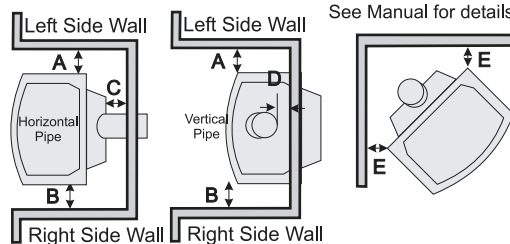
Ne doit pas être utilisé avec uncombustible solide.

**Minimum Clearances to Combustibles/Dégagement Minimum De Materiaux Combustibles**

Minimum ceiling height from top of unit: 18"/460mm  
 Minimum plafond hauteur en haut de l'appareil: 18"/460mm

- A 6"/150mm**
- B 10"/255mm**
- C 5"/125mm**
- D 2" / 50mm**
- E 2"/50mm**

908-098  
02/00



Fireplace Products International Ltd.  
Delta, BC, Canada  
Made in Canada/Fabrique au Canada

DOOR SEAL: Please check that the door is properly sealed.

For the State of Massachusetts, installation and repair must be done by a plumber or gasfitter licensed in the Commonwealth of Massachusetts.

For the State of Massachusetts, flexible connectors shall not exceed 36 inches in length.

For the State of Massachusetts, the appliances individual manual shut-off must be a t-handle type valve.

# INSTALLATION

## BEFORE YOU START

Safe installation and operation of this appliance requires common sense, however, we are required by the Canadian Safety Standards and ANSI Standards to make you aware of the following:

**INSTALLATION AND REPAIR SHOULD BE DONE BY A QUALIFIED SERVICE PERSON. THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND AT LEAST ANNUALLY BY A PROFESSIONAL SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIAL, ETC. IT IS IMPERATIVE THAT CONTROL COMPARTMENTS, BURNERS AND CIRCULATING AIR PASSAGEWAYS OF THE APPLIANCE BE KEPT CLEAN.**

**DUE TO HIGH TEMPERATURES, THE APPLIANCE SHOULD BE LOCATED OUT OF TRAFFIC AND AWAY FROM FURNITURE AND DRAPERIES.**

**WARNING: FAILURE TO INSTALL THIS APPLIANCE CORRECTLY MAY CAUSE A SERIOUS HOUSE FIRE AND WILL VOID YOUR WARRANTY.**

**CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURES, ESPECIALLY THE FIREPLACE GLASS, AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION.**

**YOUNG CHILDREN SHOULD BE CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE APPLIANCE.**

**CLOTHING OR OTHER FLAMMABLE MATERIAL SHOULD NOT BE PLACED ON OR NEAR THE APPLIANCE.**

## IMPORTANT: SAVE THESE INSTRUCTIONS

The EMERALD Freestanding Gas Stove must be installed in accordance with these instructions. Carefully read all the instructions in this manual first. Consult the "authority having jurisdiction" to determine the need for a permit prior to starting the installation.

## GENERAL SAFETY INFORMATION

- 1) The appliance installation must conform with local codes or, in the absence of local codes, with the current Canadian or National Gas Codes, CAN1-B149 or ANSI-223.1 Installation Codes.
- 2) The appliance when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes with the current National Electrical Code, ANSI/NFPA 70 or CSA C22.1 Canadian Electrical Code.
- 3) This appliance is Listed for bedroom installations when used with a Listed Millivolt Thermostat. Some areas may have further requirements, check local codes before installation.
- 4) This appliance is Listed for Alcove installations, maintain minimum Alcove clearances as follows, minimum ceiling height of 47", minimum width of 41" and a maximum depth of 24".
- 5) This unit is not approved for installation into a mobile home.
- 6) See general construction and assembly instructions.
- 7) This appliance must be connected to a vent and terminate to the outside of the building envelope. Never vent to another room or inside a building.
- 8) Inspect the venting system annually for blockage and any signs of deterioration.
- 9) Any safety glass removed for servicing must be replaced prior to operating the appliance.
- 10) To prevent injury, do not allow anyone who is unfamiliar with the operation to use the fireplace.
- 11) Wear gloves and safety glasses for protection while doing required maintenance.

- 12) Under no circumstances should this appliance be modified. Parts that have to be removed for servicing should be replaced prior to operating this appliance.
- 13) Installation and any repairs to this appliance should be done by a qualified service person. A professional service person should be called to inspect this appliance annually. Make it a practice to have all of your gas appliances checked annually.
- 14) Do not strike the glass door.
- 15) Under no circumstances should any solid fuels (wood, paper, cardboard, coal, etc.) be used in this appliance.
- 16) The appliance area must be kept clear and free of combustible materials, (gases and other flammable vapours and liquids).
- 17) This unit can be installed on a solid combustible surface like a wood floor as well as on carpeting.
- 18) Do not connect this gas appliance to chimney flue serving a separate solid-fuel burning appliance.
- 19) **WARNING:** Operation of this appliance when not connected to a properly installed and maintained venting system or tampering with the blocked vent shutoff system can result in carbon monoxide (CO) poisoning and possible death.
- 20) This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

Emissions from burning wood or gas could contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

## INSTALLATION CHECKLIST

- 1) Check Clearances to Combustibles, page 7.
- 2) Install Optional Fan, page 7.
- 3) Install venting, page 8.
- 4) Make gas connections, page 9. Test the pilot. Must be as per diagram, page 17. If converting to Propane (see page 10, or if converting to lower Btu Rating (see page 11).
- 5) Test Gas Pressure, page 9.
- 6) Install log set where indicated on page 12.
- 7) Test for flue spillage (draft test), page 13.

# INSTALLATION

8) Install optional Remote Control, or Wall Thermostat, page 13.

9) Final check, page 14.

Before leaving this unit with the customer, the installer must ensure that the appliance is firing correctly and operation fully explained to customer.

**This includes:**

1) Locking the appliance to ensure the correct firing rate (rate noted on label) after burning appliance for 15 minutes.

2) If required, adjusting the primary air to ensure that the flame does not carbon. First allow the unit to burn for 15-20 min. to stabilize.

**CAUTION: Any alteration to the product that causes sooting or carboning or that results in damage is not the responsibility of the manufacturer.**

## CLEARANCES TO COMBUSTIBLES

The clearances listed below are MINIMUM distances. Measure the clearance to both the appliance and the chimney connector. **(The farthest distance is correct if the two clearances do not coincide.)** For example, if the appliance is set as indicated in one of the figures but the connector is too close, move the stove until the correct clearance to the connector is obtained.

This appliance may be installed only with the clearances as shown in the situations pictured. Do not combine clearances from one type of installation with another in order to achieve closer clearances.

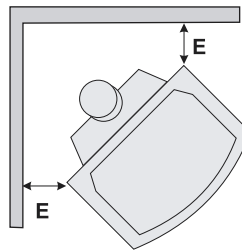
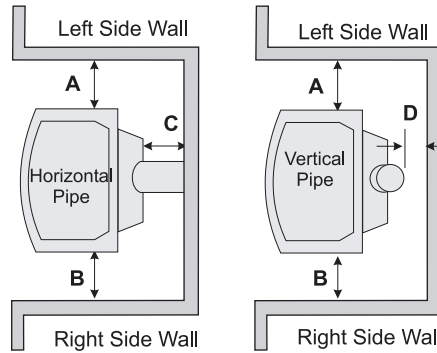
Use the minimum clearances shown in the diagrams below for installation with "B" vent.

**E63-NG1 & E63-LP1 Clearances**

A	Left Side Wall to Unit	6" / 150 mm
B	Right Side Wall to Unit	10" / 255 mm
C	Back Wall to Unit	5" / 125 mm
D	Vertical Vent Pipe to Back Wall	2" / 50 mm
E	Unit Corner to Wall	2" / 50 mm
Mantel		18" / 460 mm
Unit to Alcove Ceiling		18" / 460 mm
Max. Alcove Depth		24" / 610 mm

Minimum ceiling height is 18" / 460 mm from top of unit.

If further reduced clearances are needed, obtain requirements for construction of a protected wall from your local building authorities and their allowable reductions of the listed clearances.



This unit can be installed on a solid combustible surface like a wood floor. This unit can also be installed directly on carpeting or vinyl when the bottom pedestal cover plate (provided with unit) is installed.

## OPTIONAL FAN INSTALLATION

**Fan Kit Contains:**

- |      |  |
|------|--|
| Qty. | Description                              |
| 1    | Fan Speed Controller with nut, and knob. |
| 1    | Fan Assembly c/w green wire attached     |
| 1    | power cord                               |
| 1    | Plastic locking grommet                  |

1) Remove the Top Control Panel Assembly by removing the three screws. Diagram 1.

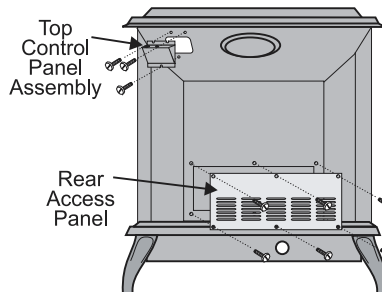


Diagram 1

2) Remove the nylon hole plug from the control panel.

3) Install the fan speed controller onto the control panel and secure with nut. Connect remaining wire harness wires to speed control. NOTE: Speed control wires must

be in the down position when control panel is in place.

- 4) Push black knob onto speed control.
- 5) Remove the rear access panel on the back of the stove. Remove the 3 top screws, but only loosen the 3 bottom screws - the panel can then be lifted off. Install the fan onto pins as per diagram 2.

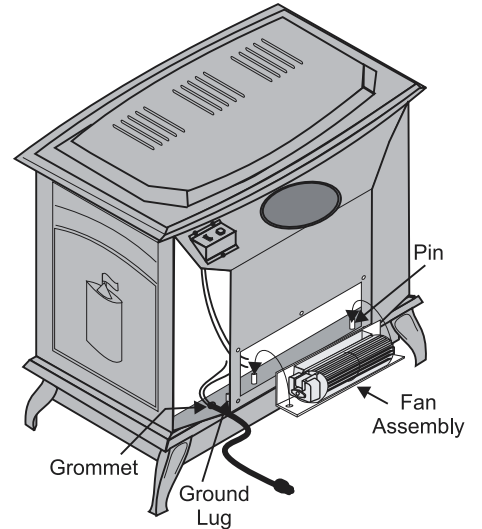


Diagram 2

*Hint for pushing fan down onto pins - rub a bit of dish soap on the pins so the grommets will slide down more easily. Check to make sure the fan is seated properly on the pins - try to move the fan back and forth.*

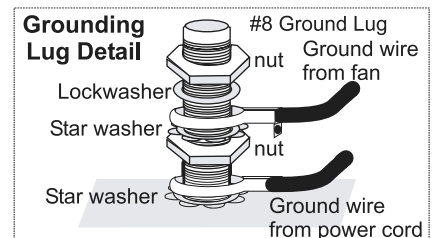
6) Push power cord through hole in the rear panel 14" - 16" and tie a loose knot in the cord on the inside to prevent the power cord from being pulled out. Diagram 2.

7) Install locking grommet to power cord and push through hole in the rear panel and give a 1/4 turn to secure.

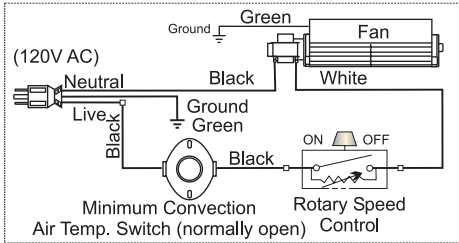
**NOTE: When running wires, keep them clear of valve assembly and tubing to avoid tangling of wires and valve.**

**NOTE: Be careful not to cut wires when passing through holes in the fire-box.**

8) Run green ground wire from fan and connect to grounding lug.



# INSTALLATION



- 9) Connect green power cord ground wire to grounding lug.
- 10) Run neutral black wire from power cord and connect to fan motor.
- 11) Run live black wire from power cord and connect to speed control wire.
- 12) Connect the white wire of the wire harness to the fan terminal.

**NOTE:** Pull excess wire next to fan to avoid excessive heat from the fire-box.

- 13) Ensure all wires are pulled away from firebox to avoid excessive heat and secure with stick-on wire clip.
- 14) Re-attach control panel with 3 screws, reversing step 1. Re-attach rear access panel with 6 screws, reversing step 5.

**NOTE:** When power cord is plugged in, speed control is in the ON position and stove is burning, allow 10 - 15 minutes for the thermdisc (temperature switch) to activate and turn on the Fan automatically.

**WARNING:**  
**Electrical Grounding Instructions**  
 This appliance is equipped with a three pronged (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

## DRAFT HOOD

This heater has a draft hood built in. It must not be altered, obstructed, or blocked in any way, and the unit must be installed so that the draft hood is in the same atmospheric pressure zone as the combustion air inlet to the burner. This heater must be properly connected to a venting system. This heater is equipped with a vent safety shutoff system.

**WARNING: Operation of this heater when not connected to a properly installed and maintained venting system or tampering with the vent safety shutoff system can result in carbon monoxide (CO) poisoning and possible death.**

## HIGH ELEVATION

The E63-1 (with 38,000 Btu) is approved in Canada for altitude 2000 ft. to 4500 ft. (CAN/CGA-2.17-M91) with the orifice kit (Part # 591-975). For Natural Gas installations above 4500 ft. follow current CAN/CGA-B149.1.

In U.S.A., for installations above 2000 ft. refer to current ANSI Z223.1 Sc8-8.1.2a appendix F, for resizing orifice.

## VENTING

This heater is a vented appliance and must be connected to a chimney/flue in accordance with the installation codes.

**Note:** The rear pedestal cover plate is only required when outside air is being used. If using room air for combustion, remove this plate from the back of the pedestal.

For your safety this heater is equipped with a vent safety switch designed to sense incorrect venting and react by shutting down the gas supply. This thermally actuated switch is located within the draft hood and will detect either a blocked chimney or backdraft condition where the chimney flow has reversed. If this switch shuts the unit down, it indicates a drafting problem that must be identified and rectified without delay - the thermally activated switch must **never** be bypassed or disconnected as a hazardous or deadly condition can result.

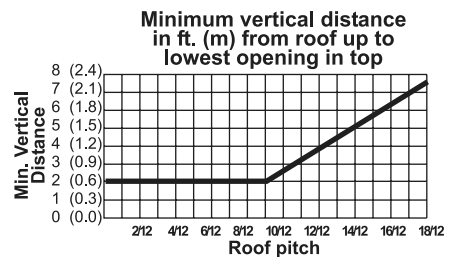
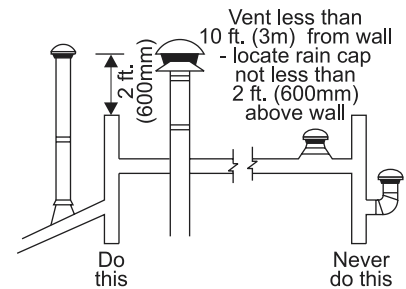
### Venting Requirements

A four inch diameter vent is required. B-Vent, Class A or Masonry with an approved liner are all acceptable. For cosmetic or aesthetic purposes 6" outer vent can be used as long as an approved inner vent is installed. Fasten but do

not penetrate the inner sleeve of the B-Vent when tightening the screw.

Follow all venting manufacturer's requirements and local building codes. In cold climates, we recommend the use of insulated B-vent, chase, and liners. For altitudes above 2000 ft. we recommend that a minimum flue height of 12 ft. is used.

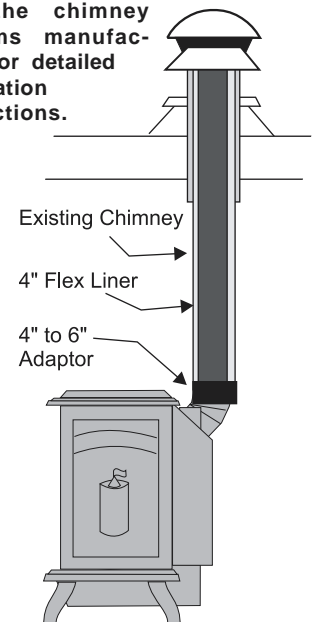
### Vent Terminations



### Installation into Existing Woodstove Flue System

- 1) Clean existing Chimney system.
- 2) Run an approved 4" flex liner or "B" vent into existing chimney.

**Note:** See the chimney systems manufacturer for detailed installation instructions.





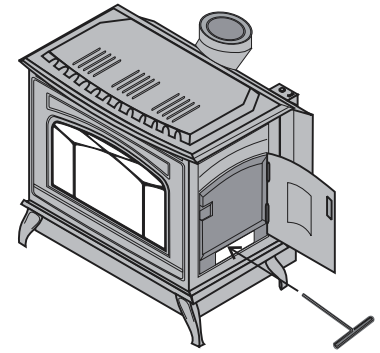
## GAS CONNECTION

The gas line can be rigid pipe, or to make installation easier, use a listed flexible connector if allowed by local codes. Copper may also be used if approved by local codes.

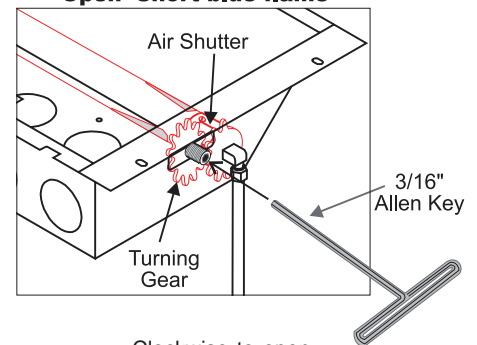
The gas connection at the valve is 3/8" NPT. For minimum and maximum supply pressure see the System Data Table.

System Data - E63-1 (with 38,000 Btu)	
For 0 to 2000 feet altitude	
Burner Inlet Orifice Sizes:	
Burner	Natural Gas #32 Propane #50
*Above 2000 ft. see National Fuel Code Orifice Chart.	
<b>Max. Input Rating</b>	
Natural Gas	38,000 Btu/h
Propane	38,000 Btu/h
<b>Min. Input Rating</b>	
Natural Gas	19,000 Btu/h
Propane	19,000 Btu/h
<b>Output Capacity with blower Off</b>	
Natural Gas	27,740 Btu/h
Propane	28,500 Btu/h
<b>Output Capacity with blower On</b>	
Natural Gas	28,690 Btu/h
Propane	29,374 Btu/h
<b>Supply Pressure</b>	
Natural Gas	min. 5.0" w.c.
Propane	min. 12.0" w.c.
<b>Manifold Pressure</b>	
Natural Gas	3.8" +/- 0.2" w.c.
Propane	11" +/- 0.2" w.c.
System Data - HIGHELEVATION: E63-NG1	
For 2,000 - 4,500 feet altitude	
Burner Inlet Orifice Sizes:	
Burner	Natural Gas #33
<b>Max. Input Rating</b>	
Natural Gas	34,000 Btu/h
<b>Min. Input Rating</b>	
Natural Gas	17,000 Btu/h
<b>Output Capacity with blower Off</b>	
Natural Gas	24,820 Btu/h
<b>Max. Output Capacity with blower On</b>	
Natural Gas	25,670 Btu/h

System Data - E63-1 converted to 27,000 Btu (NG) or 29,000 (LP)	
For 0 to 4500 feet altitude	
Burner Inlet Orifice Sizes:	
Burner	Natural Gas #40 Propane #52
<b>Max. Input Rating</b>	
Natural Gas	27,000 Btu/h
Propane	29,000 Btu/h
<b>Min. Input Rating</b>	
Natural Gas	13,500 Btu/h
Propane	14,500 Btu/h
<b>Output Capacity with blower Off</b>	
Natural Gas	20,331 Btu/h
Propane	22,330 Btu/h
<b>Output Capacity with blower On</b>	
Natural Gas	19,575 Btu/h
Propane	21,518 Btu/h
<b>Supply Pressure</b>	
Natural Gas	min. 5.0" w.c.
Propane	min. 12.0" w.c.
<b>Manifold Pressure</b>	
Natural Gas	3.8" +/- 0.2" w.c.
Propane	11" +/- 0.2" w.c.



**Closed - Tall yellow flame**  
**Open - Short blue flame**



Clockwise to open,  
counter-clockwise to close.

**Caution:** Carbon will be produced if the air shutter is closed too much.

**Note:** Any damage due to carboning resulting from improperly setting the aeration controls is NOT covered under warranty.

**Note:** Aeration Adjustment should only be performed by an authorized Regency Installer at the time of installation or service.

## AERATION ADJUSTMENT

The burner aeration is factory set but may need adjusting due to either the local gas supply, air supply or altitude.

with 38,000 Btu	with 27,000 (NG) / 29,000 LP
Natural Gas 3/8"(9.5mm)	Natural Gas 3/16"(4.75mm)
Propane wide open	Propane 1/4" (6.35mm)

The aeration adjustment gears are located on the right side of the burner box and can be accessed from the side.

To adjust the aeration: use the allen key to turn the turning gear which will adjust the air shutter. Open the air shutter for a blue flame or close it for a yellower flame. This adjustment is performed by a qualified installer. The factory setting should be sufficient for most installations.

## GAS PIPE PRESSURE TESTING

The appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig. (3.45 kPa). Disconnect piping from valve at pressures over 1/2 psig (14" w.c.).

The manifold pressure is controlled by a regulator built into the gas control, and should be checked at the pressure test point.

**Note:** To properly check gas pressure, both inlet and manifold pressures should be checked using the valve pressure ports on the valve.

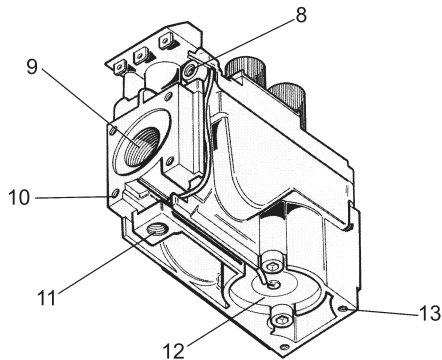
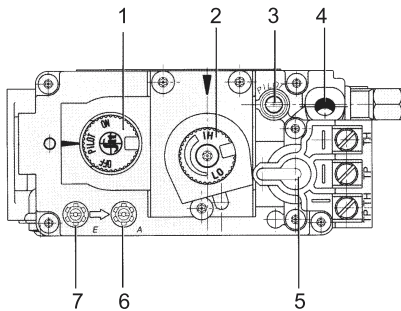
1) Make sure the valve is in the "OFF" position.

# INSTALLATION

- 2) Loosen the "IN" (# 7) and/or "OUT" (# 6) pressure tap(s), turning counterclockwise with a 1/8" wide flat screwdriver.
- 3) Attach manometer to "IN" and/or "OUT" pressure tap(s) using a 5/16" ID hose.
- 4) Light the pilot and turn the valve to "ON" position.
- 5) The pressure check should be carried out with the unit burning and the setting should be within the limits specified on the safety label.
- 6) When finished reading manometer, turn off the gas valve, disconnect the hose and tighten the screw (clockwise) with a 1/8" flat screwdriver. *Screw should be snug, but do not over tighten.*

## S.I.T. Valve Description

- 1) Gas cock knob
- 2) Manual high/low adjustment
- 3) Pilot Adjustment
- 4) Thermocouple Connection
- 5) Main Operator
- 6) Outlet Pressure Tap
- 7) Inlet Pressure Tap
- 8) Pilot Outlet
- 9) Main Gas Outlet
- 10) Flange Securing Screw Holes
- 11) Alternative TC Connection Point
- 12) Thermoelectric Unit
- 13) Additional Valve Mounting Hole



## CONVERSION KIT FROM NATURAL GAS TO PROPANE

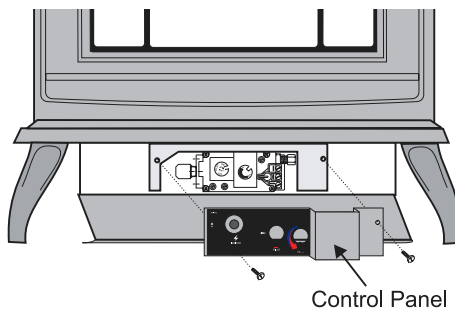
**Model #261-969**  
**for Emerald Gas Stoves and Gas Inserts using SIT 820 NOVA Gas Valve**

**THIS CONVERSION MUST BE DONE BY A QUALIFIED GAS FITTER IF IN DOUBT DO NOT DO THIS CONVERSION !!**

Conversion Kit Contains:

Qty.	Part #	Description
1	910-018	SIT Conversion Kit-50% Turndown LP
1	910-037	LP Injector (Pilot Orifice)
1	904-641	Burner Orifice #50
1	908-175	E63/E65 Decal "Converted to Propane"
1	908-528	Red "PROPANE" label
1	908-780	Instruction Sheet

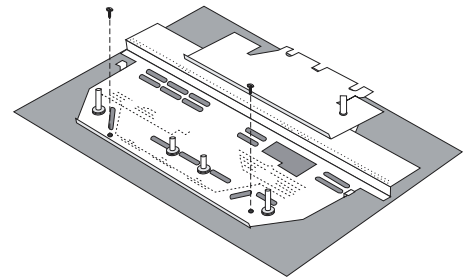
- 1) Shut off the gas supply.
- 2) Open the valve door and remove the control panel.



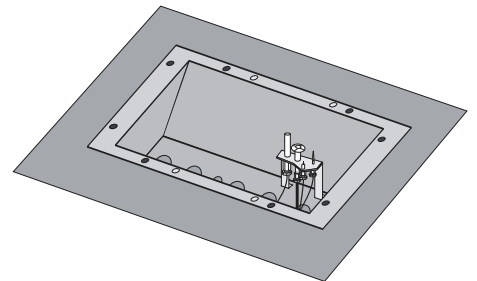
- 3) Open the front door. Open the right side door and there is a cutout in the heat shield through which can be seen a wing nut threaded on to a stud attached to the front door. Loosen this nut by turning it counterclockwise.



- 4) Carefully remove the logs, embers and rockwool.
- 5) Remove burner. See diagram below.



**Note: Use a magnetic type screwdriver if possible.**

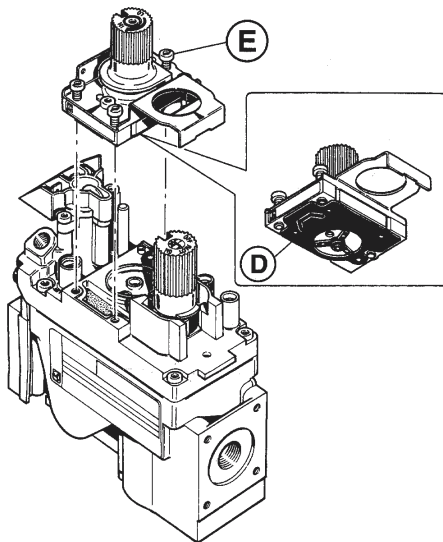
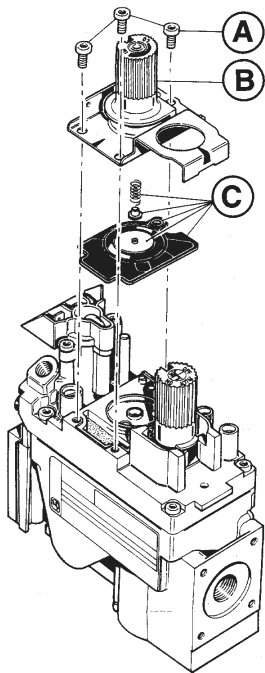


*Pilot assembly is now accessible for steps 6) to 11).*

- 6) Remove and discard the 3 pressure regulator mounting screws (A), pressure regulator tower (B) and diaphragm (C).
- 7) Insure that the rubber gasket (D) is properly positioned and install the new HI/LO pressure regulator assembly to the valve using the new screws (E) supplied with the kit. Tighten screws securely.
- 8) Pull off the pilot cap to expose the pilot orifice.



# INSTALLATION



- 9) Unscrew the pilot orifice with the allen key and replace with the LP pilot orifice in the kit.



Burner Orifice

- 10) Remove burner orifice with a 1/2" wrench and discard. Use a wrench to hold on to the elbow behind the orifice.
- 11) Reinstall new burner orifice LP stamped #50 and tighten.

- 12) Reverse steps 4) to 2).
- 13) Attach the Conversion label "This unit has been converted to Propane" on top of the Serial # decal. E63/E65: Part #175

### THIS UNIT HAS BEEN CONVERTED TO PROPANE

Model/Modèle: E63-LP Emerald Freestanding Gas Heater - Propane E65-LP Emerald Direct Vent Gas Heater - Propane		
Minimum supply pressure	12" WC/G.E. (3.00 kPa)	Pression d'alimentation minimum
Manifold pressure High	11" WC/G.E. (2.74 kPa)	Pression à la tubulure d'échappement élevée
Manifold pressure Low	2.9" WC/G.E. (0.72 kPa)	Pression à la tubulure d'échappement basse
Orifice size	#50 DMS (1.5mm)	Dimensions de l'orifice
Output -fan OFF	28650 Btu/h (8.39 Kw/h)	Débit Calorifique-Ventilateur Éteint Btu/h
Output -fan ON	30172 Btu/h (8.86 Kw/h)	Débit Calorifique-Ventilateur en Marche Btu/h
Altitude	0-2000 ft/91 (0-610m)	Latitude
Maximum Input	38,000 Btu/h (11.14 Kw/h)	Débit Calorifique maximum
Minimum Input	19,000 Btu/h (5.57 Kw/h)	Débit Calorifique minimum

E63/E65 Conversion Decal: 908-175

- 14) Replace yellow "Natural Gas" label with red "Propane" label
- 15) Check for gas leaks.
- 16) Check inlet and outlet pressures.
- 17) Check operation of flame control.
- 18) Check for proper flame appearance and glow on logs.

## Reduction Kit to Lower Btu Rating for Emerald E65-1 Gas Stove

Natural Gas - Kit #: 260-920  
Propane - Kit # 260-922

**THIS CONVERSION MUST BE DONE BY A QUALIFIED GAS FITTER IF IN DOUBT DO NOT DO THIS CONVERSION !!**

### Natural Gas Conversion Kit 260-920

#### Contains:

Qty.	Part #	Description
1	904-593	Burner Orifice #40 (Natural Gas)
1	908-365	Decal "Converted to 27,000 Btu"
1	908-363	Instruction Sheet

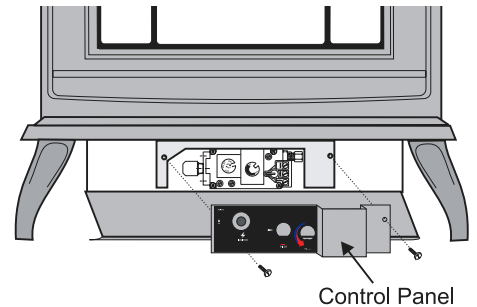
### Propane Conversion Kit 260-922

#### Contains:

Qty.	Part #	Description
1	904-390	Burner Orifice #52 (Propane)
1	908-365	Decal "Converted to 29,000 Btu"
1	908-363	Instruction Sheet

- 1) Shut off the gas supply.

- 2) Open the valve door and remove the control panel.



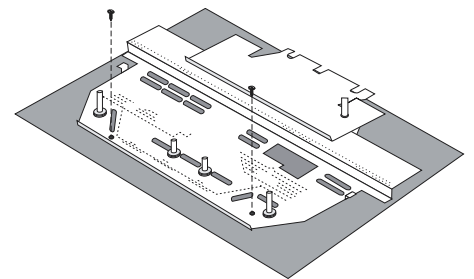
Control Panel

- 3) Open the front door. Open the right side door and there is a cutout in the heat shield through which can be seen a wing nut threaded on to a stud attached to the front door. Loosen this nut by turning it counter-clockwise.

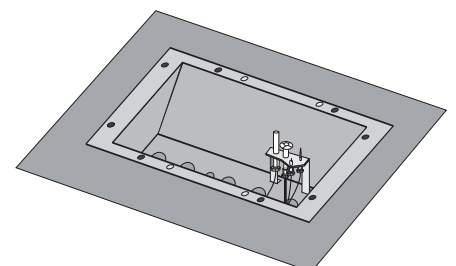


The wing nut that holds the front door is accessible through the cut-out in the right side heat shield.

- 4) Carefully remove the logs, embers and rock-wool.
- 5) Remove burner.

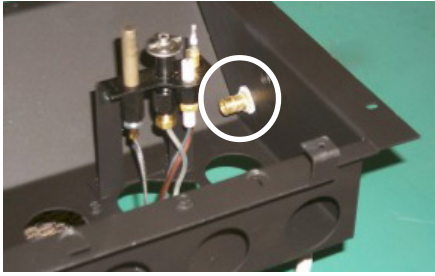


**Note: Use a magnetic type screwdriver if possible.**



# INSTALLATION

- Remove burner orifice with a 1/2" wrench and discard.



Burner Orifice

- Reinstall new burner orifice (NG stamped #40 or LP stamped #52) and tighten.
- Reverse steps 5) to 2).
- Attach the label "This unit has been converted to..." on top of the Serial # decal over the higher Btu information.
- Check for gas leaks.
- Check inlet and outlet pressures.
- Check operation of flame control. Check for proper flame appearance and glow on logs.

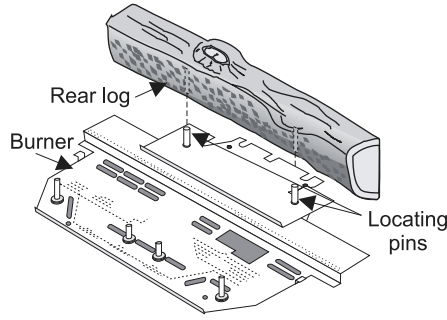


Diagram 1

Note: Do not force logs down.

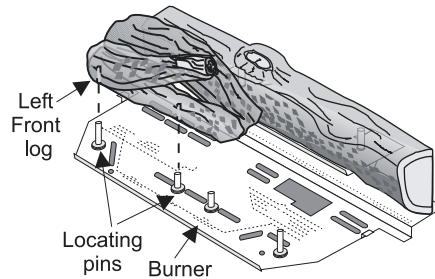


Diagram 2

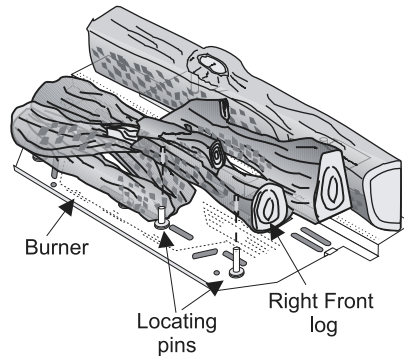


Diagram 3

**WARNING:** Dangerous operating conditions may occur if these logs are not positioned in their approved locations. Read the instructions below carefully and refer to the diagrams. If logs are broken do not use the unit until they are replaced. Broken logs can interfere with the pilot and burner operation.

- Front Right Log - Part # 902-020
- Front Left Log - Part # 902-021
- Rear log - Part # 902-022
- Embers - Part # 902-151 (1 bag)
- Lava - Part # 902-154 (1 bag)

(Part # 560-935 for the set of three logs)

- Remove the logs from the box and carefully unwrap them. The logs are fragile, handle with care - **DO NOT FORCE** into position.
- Place the rear log, carefully sliding it down onto the pins, with the flat side of the log facing the back of the unit. See diagram 1.
- Place the left front log, carefully sliding it down onto the left pins of the front burner. See diagram 2.
- Place the right front log, carefully sliding it down onto the right pins of the front burner. See diagram 3.
- Distribute the embers along the front burner but do not cover the burner ports and around the logs. Place the embers on the floor of the firebox. Place the lava on the burner tray in front of the left and right front logs. See Diagram 4.

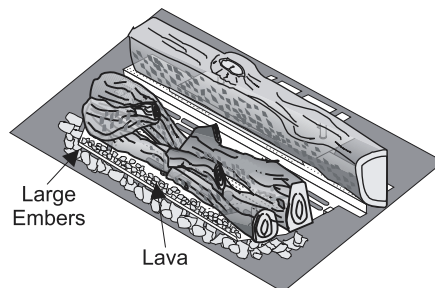


Diagram 4

## OPTIONAL DOOR GRILL INSTALLATION

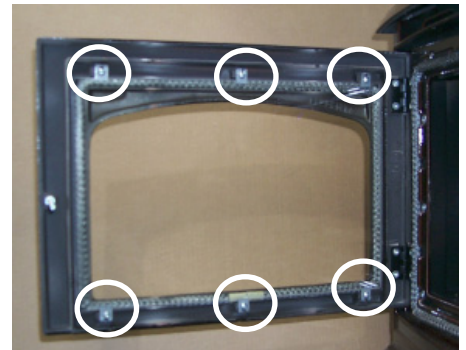
### Door Grill Kit Contains:

Qty.	Description
1	Front Door Grill
4	Screws
4	Grill Clips

- Open the front door. Open the right side door and there is a cutout in the heat shield through which can be seen a wing nut threaded on to a stud attached to the front door. Loosen this nut by turning it counter-clockwise.

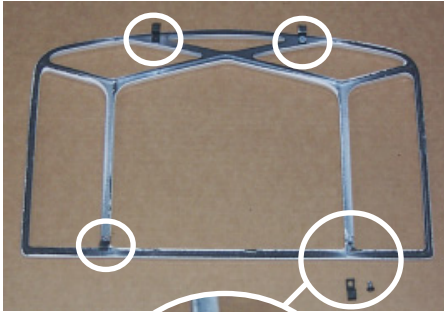


- Remove the glass panel by loosening the 6 screws securing the glass brackets. Support the glass to prevent it from dropping out and breaking.



# INSTALLATION

- Attach the 4 grill clips with the 4 screws but do not tighten down at this point.



- Place the grill into position on the front of the door, center it in the front viewing area and use the grill clips to hold it in place.

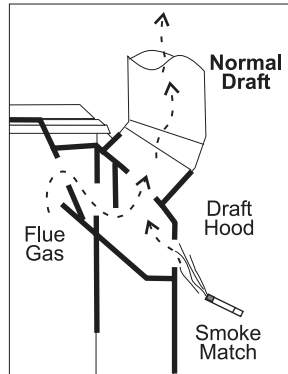


- Tighten the screws on the grill clips.
- Replace the glass and secure the glass clips, reversing step 2)
- Close the front door by reversing step 1).

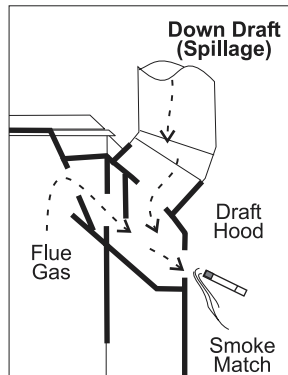
## TEST FOR FLUE SPILLAGE

A "spillage" test must be made before the installed unit is left with the customer. Follow the procedure below:

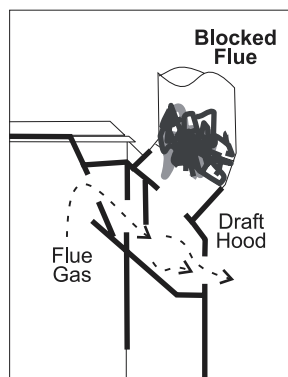
- Start all exhaust fans in the home and any other gas appliances. Then close all doors and windows.
- Light the unit and set controls to maximum.
- After five minutes, test that there is a "pull" on the flue by placing a smoke match, cigarette or similar device which gives off smoke, on the edge of the draft hood. See diagrams.



The smoke should be drawn into the draft hood. If the smoke is not drawn into the draft hood, turn the unit off and check for the cause of lack of draft.



**Note:** If the flue is blocked or has a strong reverse flow, the thermally actuated safety switch mounted in the draft hood will automatically shut off the gas supply within about 10 minutes. If the heater turns off because of this during the spillage test, check for the



**The thermally activated safety switch must be manually reset before first start-up.**

## OPTIONAL WALL THERMOSTAT

A wall thermostat may be installed if desired. Connect the wires as per the wiring diagrams. Note that the wires are connected to the "TH" on the gas valve. Use table below to determine the maximum wire length:

**Note:** Preferable if the thermostat is installed on an interior wall.

Waterford offers an optional programmable thermostat but any 250-750 millivolt rated non-anticipator type thermostat that is CSA, ULC or UL approved may be used.

**CAUTION**  
Do not connect the millivolt wall thermostat wires to the 120V wires.

### Thermostat Wire Table

Recommended Maximum Lead Length (Two-Wire) When Using Wall Thermostat (CP-2 System)	
Wire Size	Max. Length
14 GA.	50 Ft.
16 GA.	32 Ft.
18 GA.	20 Ft.
20 GA.	12 Ft.
22 GA.	9 Ft.

## OPTIONAL REMOTE CONTROL

Use the Waterford Remote Control Kit approved for this unit. Use of other systems may void your warranty.

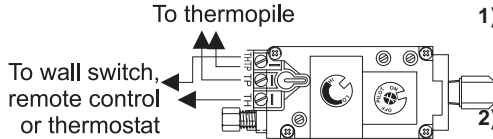
The remote control kit comes with a hand held transmitter, a receiver and a wall mounting plate.

- Choose a convenient location on the wall to install the receiver and the receptacle box (protection from extreme heat is very important). Run wires from the fireplace to that location, use Thermostat Wire Table.
- Connect the wires as per the wiring diagram on page 14.

**CAUTION**  
Do not connect the millivolt remote control wires to the 120V wires.

# INSTALLATION

- 3) Install 3 AAA alkaline batteries in transmitter and 4 AA alkaline batteries in the receiver. Install the receiver and its cover in the wall. Switch the remote receiver to "remote" mode. The remote control is now ready for operation.



## FINAL CHECK

Before leaving this unit with the customer, the installer must ensure that the appliance is firing correctly. This includes:

- 1) Locking the appliance to ensure the correct firing rate (rate noted on label) at 15 minutes.
- 2) If required, adjusting the primary air to ensure that the flame does not carbon. First allow the unit to burn for 15 min. to stabilize.
- 3) Check for proper draft.

## CAUTION

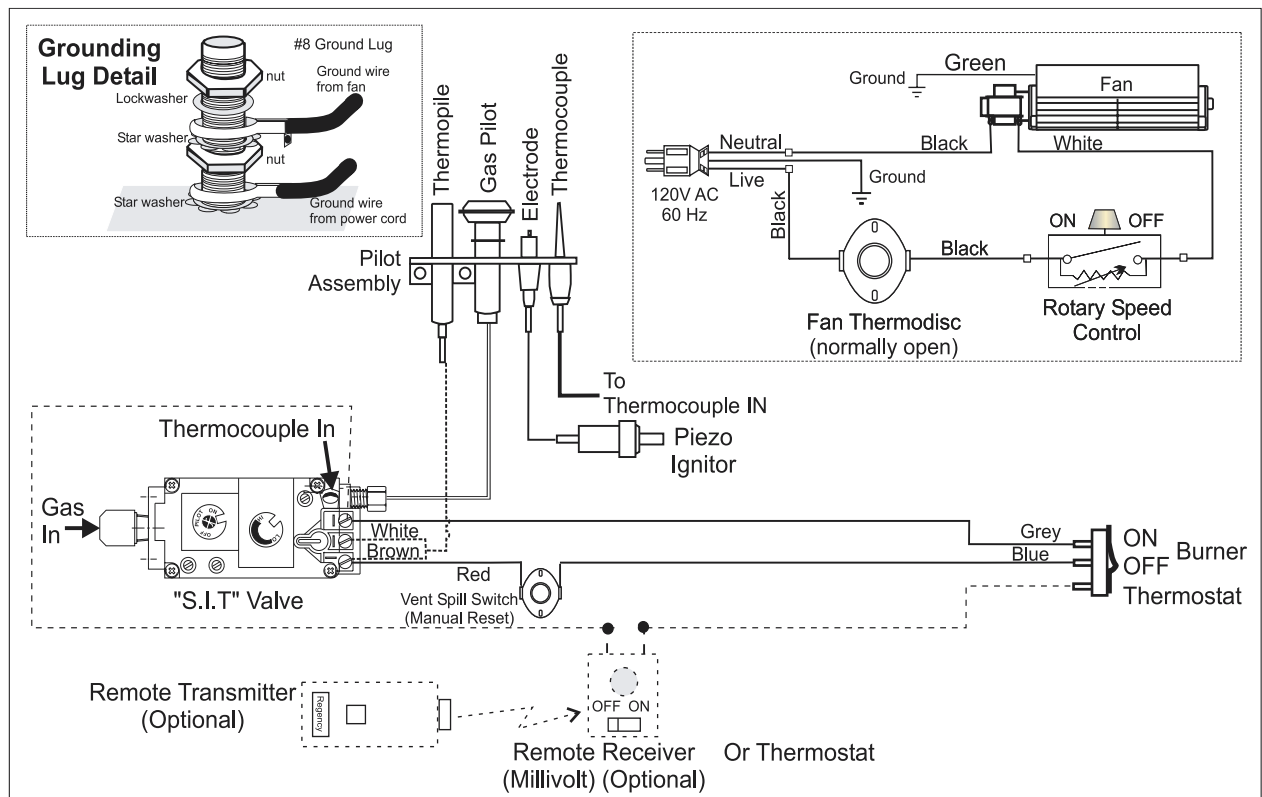
**Any alteration to the product that causes sooting or carboning that results in damage to the exterior fascia is not the responsibility of the manufacturer.**

## WIRING DIAGRAM

This heater does not require a 120V A.C. supply for operation. In case of a power failure, the burner switch and the optional remote control/thermostat will continue to operate. However, a 120V A.C. power supply is needed for the fan/blower operation.

**Caution: Ensure that the wires do not touch any hot surfaces and are away from sharp edges.**

**CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.**



**If any of the original wires as supplied with the appliance must be replaced, it must be replaced with CSA type SEW (200°C) or its equivalent.**

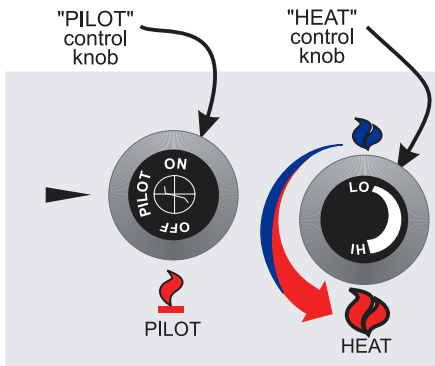
### WARNING: Electrical Grounding Instructions

**This appliance is equipped with a three pronged (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.**

## OPERATING INSTRUCTIONS

Before operating this appliance, proceed through the following check list.

- 1) Read and understand these Instructions before operating this appliance.
- 2) Check to see that all wiring is correct and enclosed to prevent possible shock.
- 3) Check to ensure there are no gas leaks.
- 4) Make sure the three pieces of door glass are properly positioned. Never operate the appliance with any of the glass removed or with the door open.
- 5) Verify that all venting and the cap is unobstructed.
- 6) Verify log placement. If the pilot cannot be seen when lighting the unit - the logs or the embers have been incorrectly positioned.
- 7) The unit should never be turned off and on without a minimum of a 60 second wait.



## LIGHTING INSTRUCTIONS

**IMPORTANT:** The PILOT knob cannot be turned from *pilot* to *off* unless it is partially depressed.

Note: Open the pedestal door of the unit before lighting the pilot. Once the pilot is lit, close the door. You should never operate the unit with the door open.

- 1) If the PILOT knob is in the *off* position proceed to Step 4.
- 2) Push in PILOT knob slightly and turn clockwise to *off*. Knob cannot be turned from *pilot* to *off* unless knob is pushed in slightly. Do not force.

- 3) Wait five minutes to allow gas, that may have accumulated in the main burner compartment, to escape. If you smell gas, follow the instructions on the front of this manual. If you don't smell gas continue on to the next step.
- 4) Turn the PILOT knob counterclockwise to *pilot* and align it with the arrow.
- 5) Push in PILOT knob all the way in and hold. Immediately push IGNITOR button until pilot lights. Continue to hold the PILOT knob in for approximately one minute, then release the PILOT knob. The pilot flame should continue to burn. If the pilot does not remain lit, repeat operation allowing a longer period before releasing PILOT knob.
- 6) Turn PILOT knob counter clockwise to *on*.
- 7) Use the Burner ON/OFF switch to turn on the burner.
- 8) Rotate the HEAT control to adjust the flame height *higher* or *lower*.

## SHUTDOWN INSTRUCTIONS

- 1) Use the Burner ON/OFF switch, thermostat or remote control to turn off the burner.
- 2) Push in the PILOT knob slightly and turn clockwise to *off*. Do not force.
- 3) Turn off all electric power to the appliance if service is to be performed.

## FIRST FIRE

The **FIRST FIRE** in your stove is part of the paint curing process. To ensure that the paint is properly cured, it is recommended that you burn your fireplace for at least four (4) hours the first time you use it with the fan on. When first operated, the unit will release an odour caused by the curing of the paint and the burning off of any oils remaining from manufacturing. Smoke detectors in the house may go off at this time. Open a few windows to ventilate the room for a couple of hours. The glass may require cleaning.

**DO NOT ATTEMPT TO CLEAN THE GLASS WHILE IT IS STILL *HOT!***

**Note:** When the glass is cold and the appliance is lit, it may cause condensation and fog the glass. This condensation is normal and will disappear in a few minutes as the glass heats up.

**DO NOT BURN THE APPLIANCE WITHOUT THE GLASS FRONT IN PLACE.**

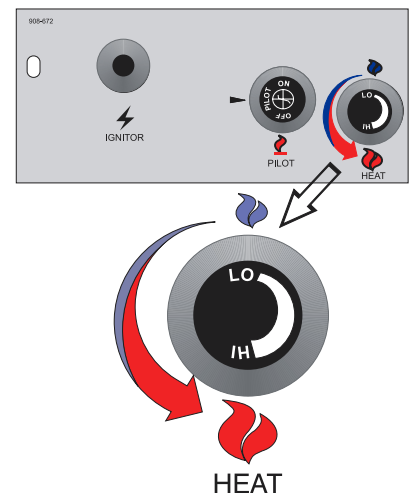
## AUTOMATIC CONVECTION FAN OPERATION

The fan operates automatically - turn the knob at the top right rear corner to adjust to the desired speed. The fan will turn on as the stove comes up to operating temperature. After the unit has been turned off and the unit cooled to below a useful heat output range the fan will shut off automatically.

## ADJUSTING FLAME HEIGHT

Your heater has an adjustable flame to tailor the look and heat output to your specific needs. It is adjusted by turning the flame adjustment dial on the gas control valve.

Turn clockwise to adjust the flame higher, counterclockwise for a lower flame.



# OPERATING INSTRUCTIONS

## COPY OF THE LIGHTING PLATE INSTRUCTIONS

### FOR YOUR SAFETY READ BEFORE LIGHTING

This appliance must be installed in accordance with local codes, if any; if not, follow the current CAN1-B149/ANSI Z 223.1 (Australia: AG601, New Zealand: NZS 5261)

**WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life. Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information consult a qualified installer, service agency or gas supplier.**

- A) This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B) BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- C) Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D) Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

#### WHAT TO DO IF YOU SMELL GAS

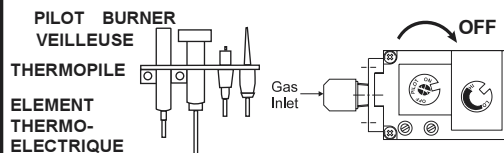
- Do not try to light any appliance
  - Do not touch any electric switch, do not use any phone in your building
  - Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

**CAUTION: Hot while in operation. Do not touch. Severe Burns may result. Due to high surface temperatures keep children, clothing and furniture, gasoline and other liquids having flammable vapors away. Keep burner and control compartment clean. See installation and operating instructions accompanying appliance.**

### LIGHTING INSTRUCTIONS

**STOP!** Read the safety information 4) Push in control knob all the way and above on this label.

- 1) Push in gas control knob slightly and turn clockwise to "OFF". Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.
- 2) Wait five (5) minutes to clear out any gas. If you then smell gas STOP! follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
- 3) Turn knob on gas control counter-clockwise to "PILOT".



- 4) Push in control knob all the way and hold in. Continually push and release the black button on spark igniter until pilot lights. Continue to hold the control knob in for about 1/2 minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 1) to 4). If knob does not pop up when released, stop and immediately call your service technician or gas supplier. If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
- 5) Turn gas control knob counterclockwise to "ON".
- 6) Use rocker switch to operate main burner.

### TO TURN OFF GAS APPLIANCE

- 1) Push in the gas control knob slightly and turn clockwise to "OFF". Do not force.
- 2) Turn off all electric power to the appliance if service is to be performed.

**DO NOT REMOVE THIS INSTRUCTION PLATE** 908-017

## NORMAL OPERATING SOUNDS OF GAS APPLIANCES

It is possible that you will hear some sounds from your gas appliance. This is perfectly normal due to the fact that there are various gauges and types of steel used within your appliance. Listed below are some examples. All are **normal operating sounds** and should not be considered as defects in your appliance.

#### Blower:

Waterford gas appliances use high tech blowers to push heated air farther into the room. It is not unusual for the fan to make a "whirring" sound when ON. This sound will increase or decrease in volume depending on the speed setting of your fan speed control.

#### Burner Tray:

The burner tray is positioned directly under the burner tube(s) and logs and is made of a different gauge material from the rest of the firebox and body. Therefore, the varying thicknesses of steel will expand and contract at slightly different rates which can cause "ticking" and "cracking" sounds. You should also be aware that as there are temperature changes within the unit these sounds will likely re-occur. Again, this is normal for steel fireboxes.

#### Blower Thermodisc:

When this thermally activated switch turns ON it will create a small "clicking" sound. This is the switch contacts closing and is normal.

#### Pilot Flame:

While the pilot flame is on it can make a very slight "whisper" sound.

#### Gas Control Valve:

As the gas control valve turns ON and OFF, a dull clicking sound may be audible, this is normal operation of a gas regulator or valve.

#### Unit Body/Firebox:

Different types and thicknesses of steel will expand and contract at different rates resulting in some "cracking" and "ticking" sounds will be heard throughout the cycling process.



## MAINTENANCE INSTRUCTIONS

- 1) Always shut the valve off before cleaning. For relighting, refer to lighting instructions. Keep the burner and control compartment clean by brushing and vacuuming at least once a year. When cleaning the logs, use a soft clean brush as the logs are fragile and easily damaged.
- 2) Clean glass (never when unit is hot), appliance, and door with a damp cloth. Never use an abrasive cleaner.
- 3) The heater is finished in a porcelain finish or with a heat resistant paint and should only be refinished with heat resistant paint (not with wall paint). Waterford uses Stove-Bright Paint - Metallic Black #6309.

Never use an abrasive cleaner on the porcelain finish as it may scratch the surface.

- 4) Make a periodic check of burner for proper position and condition. Visually check the flame of the burner periodically, making sure the flames are steady; not lifting or floating. If there is a problem, call a qualified service person.
- 5) The appliance and venting system must be inspected before use, and at least annually, by a qualified field service person, to ensure that the flow of combustion and ventilation air is not obstructed.

During the annual service call, the burner should be removed from the burner tray and cleaned. Replace the embers - do not block the pilot or burner ports.

- 6) Keep the area near the appliance clear and free from combustible materials, gasoline and other flammable vapours and liquids.

**CAUTION: ANY SAFETY SCREEN OR GUARD REMOVED FOR SERVICING AN APPLIANCE MUST BE REPLACED PRIOR TO OPERATING THE APPLIANCE.**

**WARNING: CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURE AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION. YOUNG CHILDREN SHOULD BE CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE APPLIANCE.**

**CLOTHING OR OTHER FLAMMABLE MATERIAL SHOULD NOT BE PLACED ON OR NEAR THE APPLIANCE.**

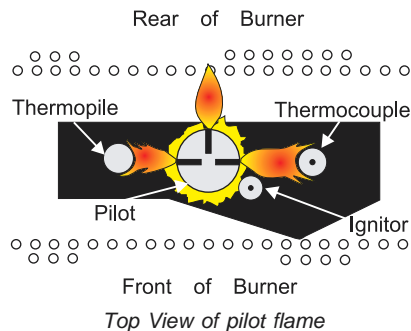
**DO NOT USE THIS APPLIANCE IF ANY PART HAS BEEN UNDER WATER. IMMEDIATELY CALL A QUALIFIED SERVICE TECHNICIAN TO INSPECT THE APPLIANCE AND TO REPLACE ANY PART OF CONTROL SYSTEM AND ANY GAS CONTROL WHICH HAS BEEN UNDER WATER.**

- 7) Verify proper operation after servicing.

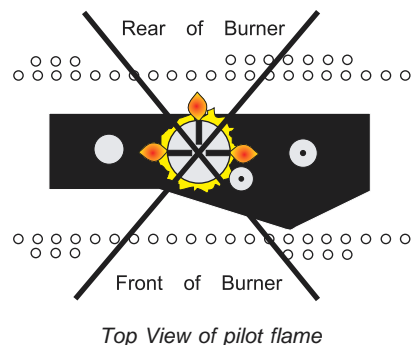
## PILOT ADJUSTMENT

Periodically check the pilot flames. Correct flame pattern has three strong blue flames: 1 flowing around the thermopile and 1 around the thermocouple, and 1 flowing across the rear of the burner (it does not have to be touching the burner).

**Note: If you have an incorrect flame pattern, contact your Waterford dealer for further instructions.**



Incorrect flame pattern will have small, probably yellow flames, not coming into proper contact with the rear of the burner or thermopile.



## LOG REPLACEMENT

The unit should never be used with broken logs. Turn off the gas valve and allow the unit to cool before opening door to carefully remove the logs. The pilot light generates enough heat to burn someone. If for any reason a log should need replacement, you must use the proper replacement log. The position of these logs must be as shown in the diagram under Log Installation.

**Note: Improper positioning of logs may create carbon build-up and will alter the unit's performance which is not covered under warranty.**

## GLASS REPLACEMENT

Your EMERALD stove is supplied with high temperature, 5 mm Neoceram ceramic glass that will withstand the highest heat that your unit will produce. In the event that you break your glass by impact, purchase your replacement door from an authorized Waterford dealer only, and follow our step-by-step instructions for replacement.

- 1) Open the front door. Open the right side door and there is a cutout in the heat shield through which can be seen a wing nut threaded on to a stud attached to the front door. Loosen this nut by turning it counter-clockwise.



*The wing nut that holds the front door is accessible through the cut-out in the right side heat shield.*

- 2) Remove the six screws that secure the retainers holding the glass in place.
- 3) Remove the glass and replace with the new glass.
- 4) Install two bottom retainers and turn the screws in just enough to support the glass.
- 5) Install the other retainers, tighten the screws alternately. Do not overtighten as this can damage the glass.
- 6) Close the door. Thread the nut onto the end of the stud.

# MAINTENANCE

Replacement Part  
# 940-087 Emerald Glass

**WARNING: Do not operate appliance with glass panels removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.**

Note: Wearing gloves will protect your hands while handling glass.

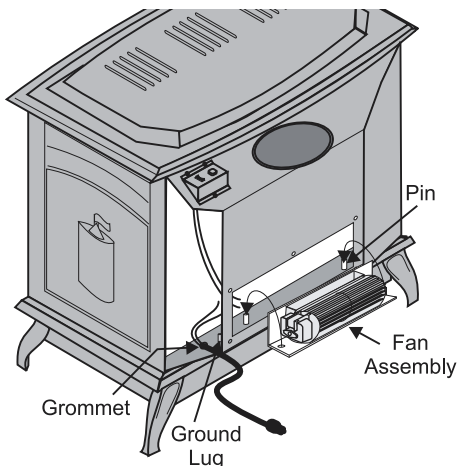
## REPLACING THE GASKET

The Emerald has 3/8" fiberglass gasket in the front door. Should it ever need replacement, use only the proper replacement gasket that is available from your Waterford dealer. To replace the gasket, follow this procedure.

- 1) Open the front door (see instructions above in Glass Replacement 1)).
- 2) Remove the existing gasket and clean its channel with a scraper or wire brush.
- 3) Lay a thin bead of gasket cement the entire length of the channel.
- 4) Lay the gasket in the channel with sufficient pressure that it stays in place. Trim the excess from the end of the gasket so that it butts snugly against the other end without leaving a gap.
- 5) Close the door and apply firm pressure to seat the gasket evenly throughout.

## FAN MAINTENANCE

If your fan requires maintenance or replacement, access to the fan is through the plate on the rear wall of the firebox.



**NOTE: the unit MUST NOT be operated without the fan access panel securely in place and correctly sealed.**

**IMPORTANT: These fans collect a lot of dust from within your home. Ensure you maintain these fan motors on a regular basis by vacuuming out the fan squirrel cages, around the motor, and around the grills on the back of the stove.**

**IMPORTANT**  
Disconnect power supply  
before servicing

**WARNING:**  
**Electrical Grounding Instructions**  
This appliance is equipped with a three pronged (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

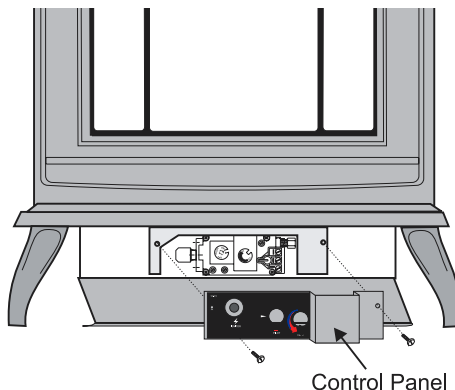
To replace fan: See the fan installation instructions on page 7 and reverse the steps.

## REMOVING VALVE

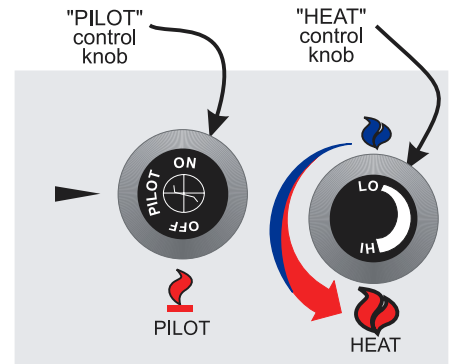
If your valve requires maintenance or replacement, use the following instructions:

Note: Always close off the gas supply before removing the valve.

- 1) If optional fan is installed, disconnect power source to stove.
- 2) Remove access panel.



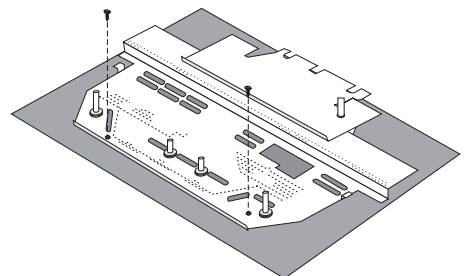
- 3) Disconnect gas line to stove.
- 4) Disconnect 3/8" NPT pipe from 90° elbow on valve.
- 5) Disconnect the two (2) switch wires from valve.



- 6) Disconnect piezo wire.
- 7) Open the front door. Open the right side door and there is a cutout in the heat shield through which can be seen a wing nut threaded on to a stud attached to the front door. Loosen this nut by turning it counter-clockwise.

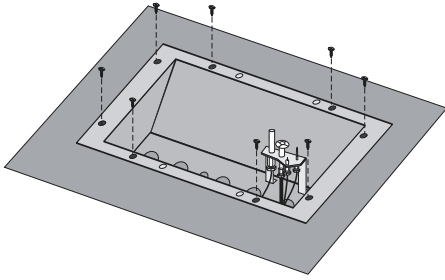


- 8) Carefully remove the logs, embers and rockwool.
- 9) Remove burner. See diagram below.

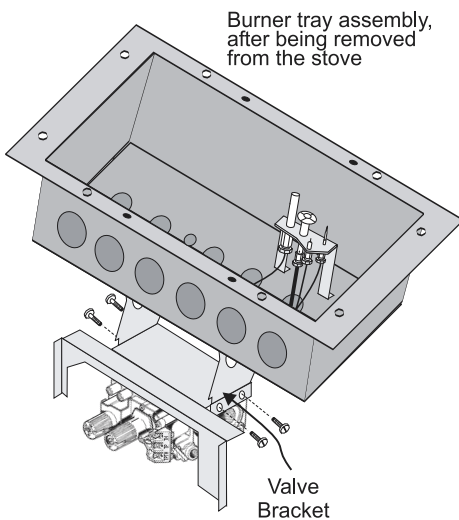


Note: Use a magnetic type screwdriver if possible.

- 10) Remove all 8 screws holding the burner tray assembly in place.



- 11) Carefully lift the burner tray assembly out.



- 12) To replace the burner tray assembly, simply reverse these instructions.

**To remove valve from valve assembly, continue.**

- 13) Remove two (2) thermopile wires.
- 14) Remove thermocouple with a 9 mm (metric) wrench.
- 15) Remove pilot nut with an 11 mm wrench.
- 16) Remove valve to orifice nut with a 5/8" wrench.
- 17) Remove inlet pipe with pipe wrench. Note orientation of 90° elbow.
- 18) Remove two (2) phillips head M5 screws on each side of the valve.
- 19) Remove valve and remove gas out 90° brass fitting. Note orientation of fitting.

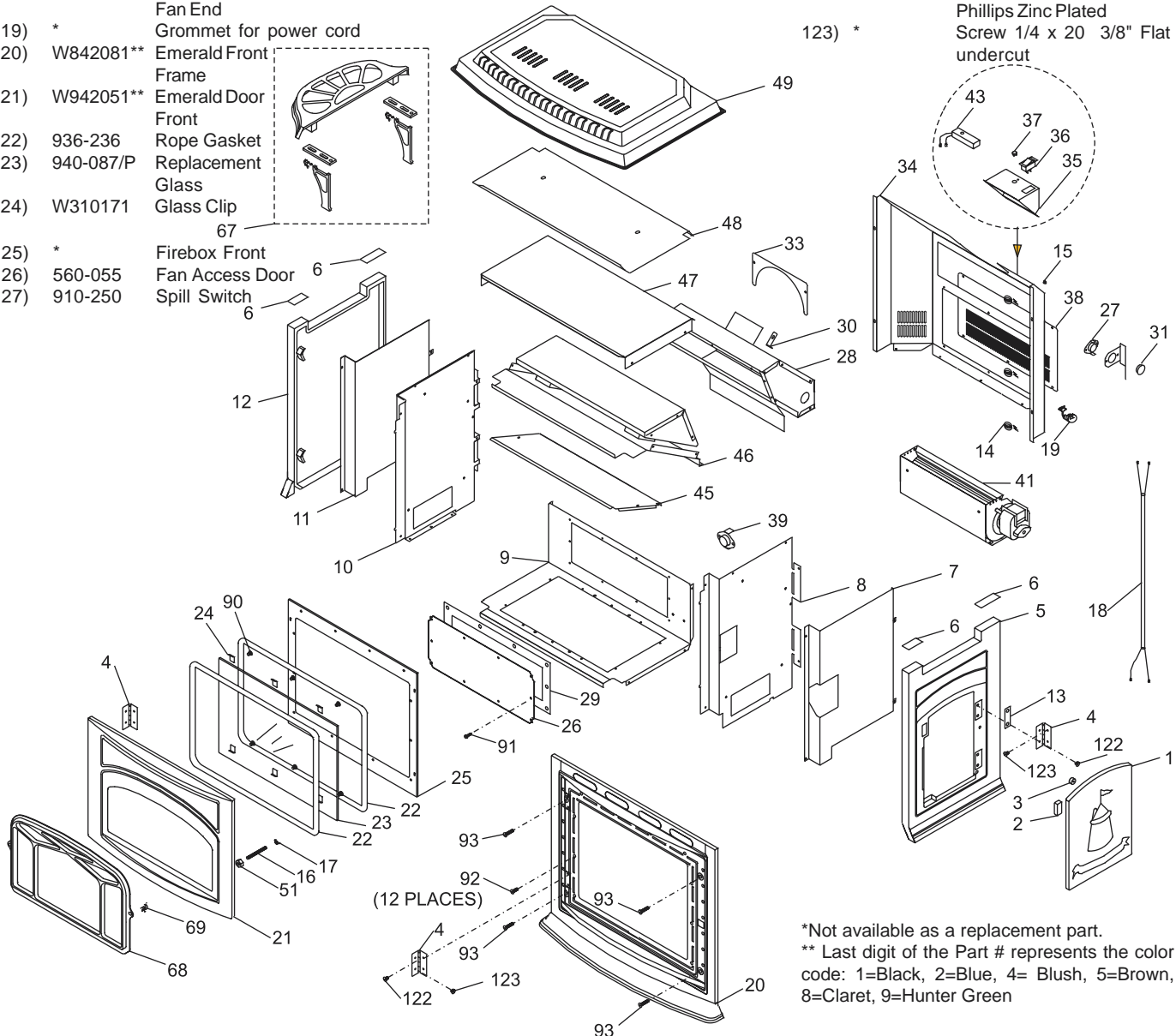
## INSTALLING VALVE ASSEMBLY

- 1) To install a new valve assembly, reverse instructions for **removing valve**. See assembly steps 1-12.
- 2) Check for leaks and manifold pressure. See **Gas Pressure Test** instructions.
- 3) To reinstall valve, reverse instructions for removing valve assembly, steps 13-19.

# PARTS LIST

## MAIN ASSEMBLY

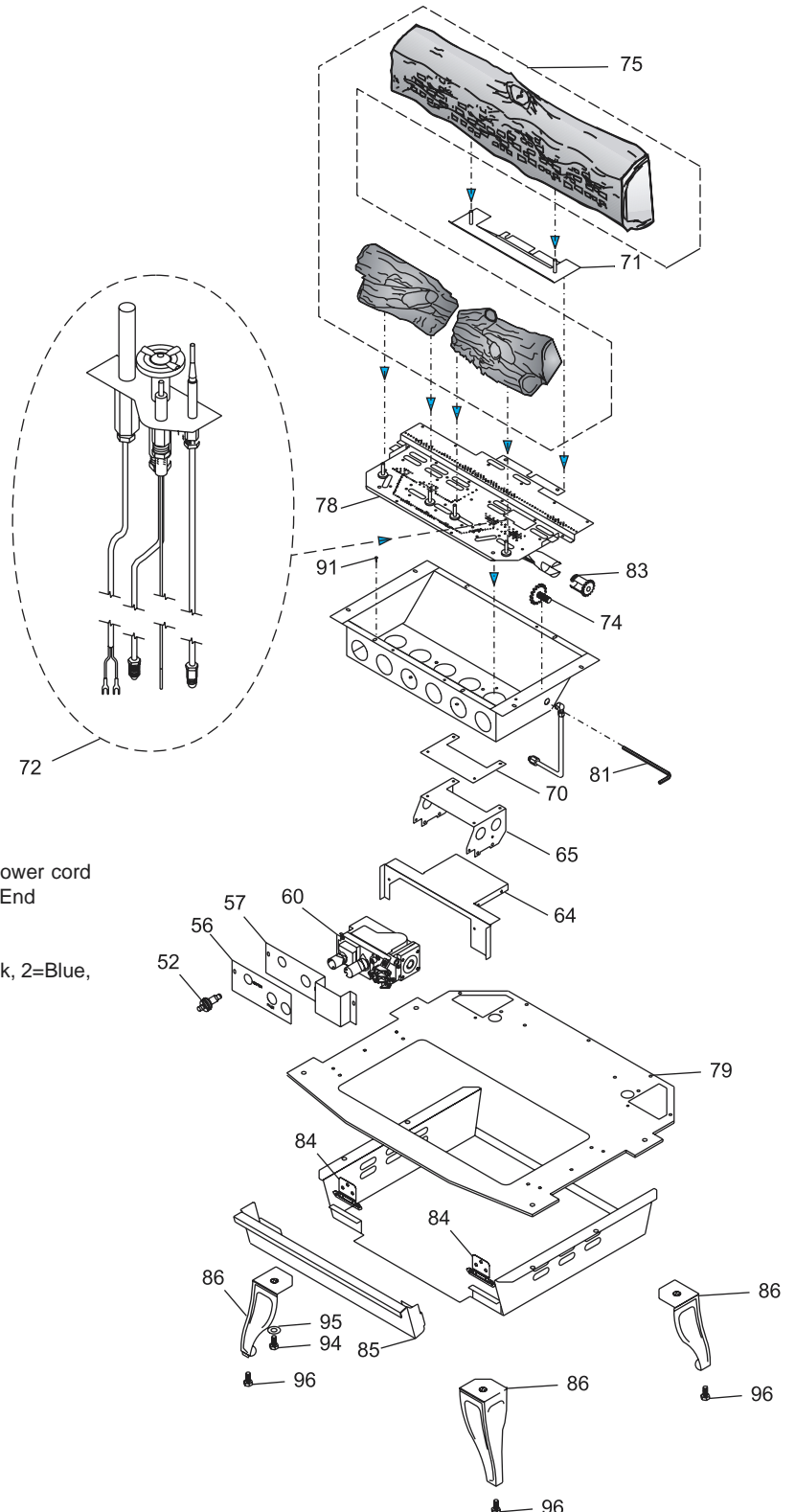
Part #	Description	Part #	Description	Part #	Description	
1)	W400141** Emerald Right Door	28)	* Draft Hood Assembly	46)	260-535 Heat Exchanger Assy	
2)	904-258 Door Magnet	29)	560-030 Gasket - Relief Mounting	47)	* Firebox Heatshield	
3)	948-134 Door Stop	30)	* B-Vent Clip	48)	* Top Heat Shield	
4)	44351 Black Butt Hinge	31)	* Access Plug	49)	W841991** EmeraldHob	
5)	W842001** Emerald Right Side	33)	* Pipe Collar	51)	* Nut 1/4 x 20 Hex	
6)	41211 Tape Gasket w/adhesive Backing	34)	250-020 Rear Panel	67)	42801** Side Shelf with Brackets (Optional)	
7)	* Heat Shield - Right	35)	260-037 Rear Control Panel	68)	942-061** Decorative Door Grill Front (Optional)	
8)	* Firebox - Right	36)	910-241 Burner ON/OFF Switch	69)	* Screw - 1/4 x 1/2" Flat Head Phillip Zinc Plated	
9)	* Firebox - Base/Back	37)	* Hole Plug 0.375	90)	* Screw #10-24 x 1/4 Pan Head	
10)	* Firebox - Left	38)	630-021 Fan Access Panel	91)	* Screw #8 x 1/2" Hex slotted washer	
11)	* Heat Shield - Left	39)	910-233 Fan Auto On/Off Thermodisc	92)	* Screw 1/4 x 5/8" Flat Head Phillips Zinc Plated	
12)	W842121** Emerald Left Side	41)	730-517 Fan Assembly (Option)	93)	* Screw 1/4 x 1" Flat Head Phillips Zinc Plated	
13)	260-066 Door Shim	910-331/P Fan Blower	43)	910-330 Fan Speed Control (120 V)	122)	* Screw 1/4 x 1/2" Flat Head Phillips Zinc Plated
14)	* Wire Tie Wrap	904-569 Knob - Fan Speed Control (120 V)	45)	560-071 Firebox Baffle	123)	* Screw 1/4 x 20 3/8" Flat undercut
15)	* Wire Tie Mount Button					
16)	904-001 Door Rod					
17)	* Wing Nut for Door Rod					
18)	910-897 High Temp. Wire Harness- Fan End					
19)	* Grommet for power cord					
20)	W842081** Emerald Front Frame					
21)	W942051** Emerald Door Front					
22)	936-236 Rope Gasket					
23)	940-087/P Replacement Glass					
24)	W310171 Glass Clip					
25)	* Firebox Front					
26)	560-055 Fan Access Door					
27)	910-250 Spill Switch					



\*Not available as a replacement part.  
 \*\* Last digit of the Part # represents the color code: 1=Black, 2=Blue, 4= Blush, 5=Brown, 8=Claret, 9=Hunter Green

## BURNER & LOG ASSEMBLY

Part #	Description
52)	910-190 Piezo Igniter with Nut
56)	908-672 Control Panel Decal
57)	490-061 Switch Plate
	251-524/P Valve Assembly S.I.T. - Natural Gas
	251-526/P Valve Assembly S.I.T. - Propane
	261-969 Propane Conversion Kit
60)	910-378 Valve S.I.T. - Natural Gas
	910-380 Valve S.I.T. - Propane
64)	* Heat Shield
65)	* Valve Bracket
	904-688 #32 Orifice - N.G. (38,000 Btu)
	904-641 #50 Orifice - LP (38,000 Btu)
	904-593 #40 Orifice - N.G. (27,000 Btu)
	904-390 #52 Orifice - LP (29,000 Btu)
70)	260-042 Valve Gasket
71)	260-570 Log Stand Assy
72)	910-034 Pilot Assy-S.I.T.-3 flame - Natural Gas
	910-035 Pilot Assy-S.I.T.-3 flame-Propane
73)	* Burner Box
74)	260-565 Air Shutter Gear Assy - Female
75)	560-935 Log Set
78)	651-580 Burner Assy - NG/LP
79)	* Base Plate
80)	260-565 Air Shutter Gear Assembly - Female
81)	904-565 Hex Key 3/16" AF
82)	260-042 Valve Gasket
83)	* Air Shutter Gear Assembly - Male
84)	948-042 Hinge for Valve Access Door
85)	260-056 Valve Access Door
86)	W420011** Leg
91)	* Screw - #8 x 1/2 Hex slotted washer
94)	* Capscrew 3/8 x 3/4" Zinc Plated
95)	* Washer 3/8 Flat Zinc Plated
96)	* Levelling Bolt 5/16 x 5/8"
	910-896 High Temperature Wire Harness - to power cord
	910-897 High Temperature Wire Harness - Fan End



\*Not available as a replacement part.

\*\* Last digit of the Part # represents the color code: 1=Black, 2=Blue, 4= Blush, 5=Brown, 8=Claret, 9=Hunter Green





# WATERFORD

FINE PORCELAIN ENAMEL CAST IRON STOVES FROM IRELAND

**Waterford Fireplace Products are designed with reliability and simplicity in mind. In addition, our internal Quality Assurance Team carefully inspects each unit thoroughly before it leaves our facility. FPI Fireplace Products International Ltd. is pleased to extend this limited lifetime warranty to the original purchaser of a Waterford Product.**

**The Warranty:** Limited Lifetime

External casting, not directly in contact with the fire, such as hobs, sides, ash lips, legs, fronts and fire doors, are covered against cracks and warps resulting from manufacturer defects, parts and subsidized labour\* for three (3) years from the date of purchase and parts only thereafter.

The combustion chamber, heat exchanger, burner tubes/pans, logs, embers and all gold plating (against defective manufacture only) are covered under the Limited Lifetime Warranty for five (5) years for parts and subsidized labour\* and parts only thereafter.

Glass is covered for lifetime against thermal breakage only, parts and subsidized labour\* for three (3) years and parts only thereafter from date of purchase.

Electrical and mechanical components such as blowers, switches, wiring, thermodiscs, FPI remote controls, spill switches, thermopiles, thermocouples, pilot assembly components, and gas valves are covered for one year parts and subsidized labour\* from the date of purchase. Blowers and valves replaced under warranty are considered repairs and continue as if new with appliance. ie. twelve (12) months from original purchase date of appliance with a minimum of three (3) months coverage from date of replacement.

FPI venting components are covered parts and subsidized labour\* for three (3) years from date of installation and parts only thereafter.

**Conditions:**

Porcelain/Enamel - Absolute perfection is neither guaranteed nor commercially possible. Any chips must be reported and inspected by an authorized dealer within three days of installation. Reported damage after this time will be subject to rejection.

Any part or parts of this unit which in our judgement show evidence of such defects will be repaired or replaced at FPI's option, through an accredited distributor or agent provided that the defective part be returned to the distributor or agent **Transportation Prepaid**, if requested.

It is the general practice of FPI to charge for larger, higher priced replacement parts and issue credit once the replaced component has been returned to FPI and evaluated for manufacturer defect.

The authorized selling dealer is responsible for all in-field service work carried out on your Waterford product. FPI will not be liable for results or costs of workmanship from unauthorized service persons or dealers.

At all times FPI reserves the right to inspect product in the field which is claimed to be defective.

All claims must be submitted to FPI by authorized selling dealers. It is essential that all submitted claims provide all of the necessary information including customer name, purchase date, serial #, type of unit, problem, and part or parts requested, without this information the warranty will be invalid.

**Exclusions:**

This limited Lifetime Warranty does not extend to or include paint (charcoal units), porcelain (including pinholes, scratches and minor shade mismatch), door or glass gasketing or trim.

At no time will FPI be liable for any consequential damages which exceed the purchase price of the unit. FPI has no obligation to enhance or modify any unit once manufactured. ie. as products evolve, field modifications or upgrades will not be performed.

FPI will not be liable for travel costs for service work.

Installation and environmental problems are not the responsibility of the manufacturer and therefore are not covered under the terms of this warranty policy.

Refractory liners, gaskets, door handles, paint are not covered under the terms of this warranty policy.

Any unit which shows signs of neglect or misuse is not covered under the terms of this warranty policy.

The warranty will not extend to any part which has been tampered with or altered in any way, or in our judgment has been subject to misuse, improper installation, negligence or accident, spillage or downdrafts caused by environmental or geographical conditions, inadequate ventilation, excessive offsets, negative air pressure caused by mechanical systems such as furnaces, fans, clothes dryer, etc.

Freight damage to stoves and replacement parts is not covered by warranty and is subject to a claim against the freight carrier by the dealer.

FPI will not be liable for acts of God, or acts of terrorism, which cause malfunction of the appliance.

Performance problems due to operator error will not be covered by this warranty policy.

Products made or provided by other manufacturers and used in conjunction with the operation of this appliance without prior authorization from Waterford, may nullify your warranty on this product.

Simpson Dura-Vent venting components are covered by Simpson Dura-Vent Inc. warranty.

\* Subsidy according to job scale as predetermined by FPI.



Waterford fireplace products are designed with reliability and simplicity in mind. In addition, our internal Quality Assurance Team carefully inspects each unit thoroughly before it leaves our door.

Waterford Irish Stoves is pleased to extend this Limited Lifetime Warranty to the original purchaser of a Waterford Product.

See the inside back cover for details.

*Installer: Please complete the following information*

Dealer Name & Address: \_\_\_\_\_

\_\_\_\_\_

Installer: \_\_\_\_\_

Phone #: \_\_\_\_\_

Date Installed: \_\_\_\_\_

Serial No.: \_\_\_\_\_